



ग्रामीण विकास बजार आयोजना
Market Access for Rural Development

(MARD/ Technical Assistant Team)

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and
Submitted
by**

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List of Acronyms Used

ARD	=	Agriculture and Rural Development
CTO	=	Cognizant Technical Officer
DADO	=	District Agriculture Development Office/Officer
DC	=	District Co-ordinator
FFD	=	Farmer Field Day
FG	=	Farmer Group
ha	=	Hectare
HES	=	Horticulture Extension Specialist
HH	=	Household
HMG	=	His Majesty's Government
IPM	=	Integrated Paste Management
KG	=	Kitchen Garden
Kg	=	Kilogram
LA	=	Line Agency
M	=	Motivator
M&E TO	=	Monitoring and Evaluation Technical Officer
M&ES	=	Monitoring and Evaluation Specialist
MARD	=	Market Access for Rural Development
MG	=	Marketing Group
MS	=	Marketing Specialist
MT	=	Metric Ton
NC	=	Nutrition Co-ordinator
NGO	=	Non-government Organization
NP	=	Nagarpalika (Municipality)
NS	=	Nutrition Specialist
OFD	=	On-farm Demonstration
PC	=	Project Co-ordinator
PCO	=	Project Co-ordinator's Office
RDA	=	Regional Directorate of Agriculture
SES	=	Senior Extension Specialist
SMS	=	Subject Matter Specialist
STC	=	Short Term Consultant
TA	=	Technical Assistant
TDB	=	To be Decided
TL	=	Team Leader
TOM	=	Technical Officer Marketing
USAID/N	=	United States Agency for International Development/Nepal
VDC	=	Village Development Committee
W	=	Week
WRDA	=	Western Regional Director of Agriculture

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I. INTRODUCTION

A. Background

Market Access for Rural Development (MARD) Project is a joint undertaking of Government of Nepal and USAID. USAID is assisting the Government of Nepal (GON) in the implementation of MARD/Lumbini-Gandaki by funding a Cost-Plus-Award-Fee contract for technical assistance, training, and equipment. Assistance is provided over a five year period beginning April 1, 1997, for a total contract cost of \$3,653,761 (as of contract modification no. 1, June 23, 1999). The contract award fee is based on performance targets, rather than the usual level of effort approach. The amount of the award fee is determined on an annual basis by USAID/Nepal. The TA team is provided by the prime contractor, Chemonics International Inc. (CI), and its MARD/Rapti partners, METCON Consultants (MC), No-Frills Consulting Co. (NF), Nepali Technical Assistance Group (NTAG), University of California-Davis (UCD), International Executive Service Corps (IESC), and Volunteers in Overseas Cooperative Assistance (VOCA). CI is providing overall leadership, administrative and policy support. MC is leading local marketing development and production technical assistance. NF provides local technical assistance in technology and improved agricultural extension. NTAG and UCD are associated in providing technical assistance for programming and monitoring improved nutritional status. In addition, UCD is training and consulting in post harvest handling. IESC and VOCA are providing short-term technical assistance in agricultural production, processing, and distribution.

The MARD/Chemonics TA Team was originally deployed in Rapti zone at the beginning of the MARD/Chemonics contract. However, the team was relocated to the Lumbini-Gandaki zone in the Second Project year in September 1998 after the Team's Salyan District (Rapti zone) Coordinator, Rabindra K. Shrestha, was murdered in the line of duty by terrorists in Salyan on May 31, 1998. After detailed deliberations with USAID and HMG, the MARD Steering Committee approved the Second Annual Work Plan (July 16, 1998 - July 15, 1999) for TA activities to be conducted in production pockets of 6 Lumbini-Gandaki districts. The Third Annual Work Plan (July 16, 1999 - July 15, 2000) for TA activities to be conducted in production pockets of 6 MARD/Lumbini-Gandaki districts was approved by CTO/MARD/USAID/N on October 1999. Likewise, the Fourth Annual Work Plan (July 16, 2000 - July 15, 2001) for TA activities to be conducted in production pockets of 6 MARD/Lumbini-Gandaki districts was approved by CTO/MARD/USAID/N on July 28, 2000. It covered 8 districts of Rapti and Bheri zones. The five districts where MARD/TA operated in Rapti were Rukum, Rolpa, Salyan, Pyuthan and Dang respectively. TA Team operated in Rapti till May 1998. MARD/TA team was relocated in six districts of Lumbini-Gandaki Zone from September, 1998 with the advice and direction from HMG.

The six districts covered by the Project in Lumbini-Gandaki are Rupandehi, Kapilvastu, Nawalparasi, Syangja, Kaski and Palpa respectively.

B. Objective

The purpose of the Market Access for Rural Development Project (MARD/Lumbini-Gandaki) is to increase sales of high-value agricultural commodities and improve nutritional status in the Lumbini-Gandaki zone. The project is promoting market expansion and ensuing participation of farmers and agro-entrepreneurs in high-value commodity (HVC) production

and increased consumption of locally produced vitamin A-rich foods to accomplish this purpose.

C. Project Component

MARD Project has identified four major fields of intervention, namely :

- ◆ Market development;
- ◆ Technology and high value agriculture extension services;
- ◆ Improve nutritional status; and
- ◆ Bottom up planning and policy reform.

d. Market Development Strategies

a) Overview

MARD market development program in particular are market driven and focused on translating information from key markets into production, processing, post harvest action plans etc. The main driving force to carry on the MARD market development program has been the farmers marketing groups. Through the formation and strengthening of farmers own marketing institutions like Marketing Groups(MG), the project has aimed to achieve its declared goals and objectives. Similarly it focus on strengthening capacity of farmers marketing institution through linking them with private sector traders, wholesalers, agro processes of different market. MARD/TA Market Development Program contains a holistic package of market development activities which are integrated with other interdependent activities. This is one of the few Program in Nepal with close link between market and production. Its market development activities are not isolated programs like often found in several agricultural development projects or institutions. The whole concept behind MARD/Market Development Program is making it a sustainable marketing program.

Thus in Lumbini-Gandaki MARD TA Team focused its technical assistance for market development in following three important areas:

- Expand demand for HVC produced in project area;
- Reduce HV agricultural marketing costs;
- Expand supply of quality agri. inputs (quality seed in particular) in project area;

So, in order to attain Project objectives the project has been implementing different marketing activities in the project area.

b) Market Development Interventions

- Strengthening Market Information System (MIS)
- Develop Farmers Group/Cooperative Marketing
- Develop more Market Out-lets and Linkages with Larger Markets
- Improve Post-harvest Handling Practices
- Promotion of Agri-input Sellers

E. Terms of Reference of Marketing and Post-harvest Handling Specialist

The Marketing and Post-harvest Specialist will serve as MARD's principal agent for development intervention that increase the sales of high value agricultural products. In this capacity s/he has the responsibility for training, advising, and assisting district coordinators, motivators, NGO's line agency personnel, and Village Development Committees. His/her activities support these individuals and groups in their work with farm organizations to increase the marketing and sales of high value agricultural products.

Responsibilities and Duties

The following describes the responsibilities and duties of the Marketing Specialist.

- Serve as MARD principal Marketing and Economic analyst. S/he will be the leader for developing and carrying out the MARD analytical agenda. This agenda will be used to identify and analyze key marketing issues. These activities will include market and enterprise feasibility studies, case studies, training needs assessments, issue identifying policy analysis and rapid reconnaissance for identifying high value crops markets.
- Assist the monitoring and evaluation officer in organizing and implementing survey work required for the MARD Performance Plan Outcome Indicators and the MARD MIS. S/he will provide analytical assistance as required for reporting purposes.
- Provides technical guidance to other MARD technical assistance team members and lines agencies that addresses implementation issues related to high value crops marketing and local market development.
- Organize and provide training in high value crops enterprise management, marketing, post-harvest handling. Training will be extended to include the same subject areas for high value crops.
- Organize and complete tours for farm groups on marketing of high value crops related matters, assist other MARD technical assistance team members with tours that include marketing of high value crops and other related subjects.
- Develop extension support for the District Coordinators and motivators with traders, agro-entrepreneurs, marketing, and post-harvest handling packages, regular field visits, and follow up communications. This same extension support will be provided to line agencies, NGO's and Village Development Committee.
- Work with District Coordinators and motivators in organizing high value crops related production marketing associations and other appropriate farms distribution organizations.

In summary, the Marketing Specialist will form high value crops management marketing, market extension and training activities that significantly increase sales. These activities will support and provide leadership to MARD District Coordinators, Motivators, NGO's, HMG line agency personnel, peace crop, and Village Development Committees.

II. IMPLEMENTATION

(A) Major Market Development Activities and Their Objectives

Major Market Development Activities implemented by the Project and main objectives/concepts of these activities are given below:

1. **Strengthening Group/Cooperative Marketing (Samuha Bazaar/Byapar):**
Objective
 - To develop farmers marketing institutions/groups
 - Increase farmers marketing management capacity
 - Increase sales and income**Activities**
 - Formation of Marketing Groups(MG)
 - Meeting with MGs
 - Coordination meetings with MGs,wholesalers,truckers etc.
 - Marketing Extension Materials
 - Weighing scales and other support materials to MGs.

2. **Strengthening Market Information System (MIS):**
Objective :
Improve Market transparency to :
 - Increase bargaining power of farmers/group members;
 - Help make decision for selection of best market for farmers produces;
 - Improve production-market timing**Activities:**
 - Price Broadcast from Radio Nepal,Pokhara Station;
 - Price Information Boards(PIBS)

3. **Develop More Market Out-lets and Linkages with Larger Markets**
Objective
 - To establish linkage with major markets;
 - Expose to opportunities, constraints, market practices etc.
 - Develop sales stalls/centers at major markets for collection and distribution/sales of produces;**Activities:**
 - Market linkage Tours
 - Interaction Tours/Visits among MGs
 - Traders Visits to Production Pockets.

4. **Improve Post-harvest Handling Technology (PHT) through training and market visits/tours:**
Objective
 Improve post-harvest handling practices for reduction of marketing losses/costs and enhance competitiveness of produces
Activities:
 - Training on Post-harvest Handling
 - Post-harvest Loss assessment Tours

5. **Promotion of Agri. Input Sellers:**
Objective
 To help improve timely supply of quality seeds at fair price to farmers through local agri. input sellers
Activities:
 Training and tour on Pesticide management to Agro-vets

(B) Expected Impact (of all these activities are as follow:)

The expected impact of Market Development activities are as follows:

- Improvement in market driven production planning through improved market information and linkage;
- Reduction in unit marketing costs and increasing competitiveness of the produces of the project area;
- Increased demand for the high value agricultural produces of the project areas.
- Increase sales of the high value agricultural produces of the project areas.

III. MAJOR ACCOMPLISHMENT OF MARKET DEVELOPMENT ACTIVITIES

Overview of the Market Development Accomplishment in Rapti and Lumbini-Gandaki Project Area is given below:

MARD TA Team worked first of its five years (in 1997-98) working in Rapti area. The achievement of one year activity of the Project are given below (Table-1). For details please see Annex-I.

A) Major Accomplishment in Rapti Area, F/Y 1997/98

• **Market Information System (MIS) established:**

MIS was established for the benefit of commercial farmers and traders. Price Information Boards(PIBs) were installed at the markets of Kapurkot, Sallyan and Bijuar, Pyuthan. Price information of major commodities of 8 major markets like Butwal, Pokhara, Nepalgunj, Narayangarh, Krishnanagar, Hetaunda etc were collected regularly and disseminated to the farmers to help them make marketing decisions. Similarly, market arrival of different commodities at the Kapurkot market was collected and disseminated. Name and address of different key wholesalers of major markets of Nepal (related to Rapti area) were collected , updated and were distributed to related farmers, wholesalers of different markets.

• **Market Linkages established:**

Several market tours were organized in Nepal(for commercial farmers, agro-entrepreneurs, government officers, project staff etc). Similarly one market tour was conducted in India for 28 commercial farmers, agro-entrepreneurs, government officers, project staff etc. These tours helped enhance knowledge of market windows and establishment of market linkages for the farmers of Rapti with traders/commission agents of markets like Butwal, Pokhara, Nepalgunj, Tulsipur, Krishnanagar , Narayangarh, Kathmandu etc in Nepal and Gorakhpur, Baharaich, Faijabad etc in India for vegetables and vegetable seeds.

Two linkage tours were organized for the 40 farmers of Sallyan, and Rolpa in July 1997 (when there was glut of tomato at the Kapurkot hatbazar) to the market of Butwal and Bhairawa. This tour helped establish linkage with the traders wholesalers of Butwal and Bhairawa for the farmers. Similarly Project helped organized one tour for the farmers of Bijuar with their produces at Butwal market. Such activity helped establish linkage with the market.

• **Marketing knowledge/skill improved**

Several district level/project level training conducted on marketing helped enhance

knowledge and skill on marketing of HVC of leader farmers, line agency staff, project staff agro-entrepreneurs etc. One training on 'Agro-Entrepreneurs Development And Marketing Management' was conducted for 21 agro-entrepreneurs/commercial vegetable growers, Agro-vets etc jointly with Agro-enterprise Center, Tulsipur on December 17-19 at Lalmatia, Dang.

- **Contractual seed production and marketing promoted:**

Three Marketing Workshops were organized (participated by major vegetable seed dealers of Nepal, leading agro-industrialist and major commercial seed growers of Rapti) to promote contractual production of vegetable seeds and commercial production of maize, soybeans etc. Seed marketing Workshop organized in October 22-23, 1997 helped sign contract production of 60 mt of vegetable seed (mainly radish seeds).

Similar Seed Marketing Workshop organized in May 22-23 1998 helped sign contract of vegetable seed production amounting 82.37 mt. Likewise, Workshop on contractual production of maize, soybean for agro-processing industry was probably first of its type in the region/Nepal(?). This workshop organized in May, 1998 at Lalmatiya Dang was participated by Agro-Industry of Birgunj which offered to purchase 20000 mt of improved maize. A contract of 500 mt of maize was signed between the farmers groups and the Agro-industry. **Thus MARD had attempted to establish and strengthen linkage between the producers and the agro-processing industry which is generally neglected/overlooked in Nepal.**

- **Development of Local markets**

- Important contribution was made in the development of the Kapurkot periodic market in Sallyan through training, tours, marketing extension leaflets, MIS, providing 176 plastic crates for improving post-harvest loss, establishing and strengthening marketing group, regular field visit and interaction with the commercial farmers of the area etc. These plastic crates helped farmers to transport their produces (tomatoes) to the markets like Butwal, Kathmandu, Narayangarh etc at less loss and at low cost per unit.

Periodic market (hat bazaar) established at the initiative of the Project MARD at Bijuar, Pyuthan was used as collection center of local production as well as helpful in promoting commercial production and sales of HVC in that area.

- Similarly at the initiative of the Project and MARD/PCO, Tulsipur Chamber Of Commerce, Mayor of Tulsipur etc a new haat bazaar was established at Tusipur, Dang. MARD/TA prepared and distributed publicity posters/leaflets before the opening of the Haat bazar.

- **Promoting Group Marketing**

Project organized several meetings (attended by farmers, line agency, district co-operative office, Sallyan, VDC etc) at Kopurkot to promote group marketing. At the initiative of the Project and District Agricultural Office, Sallyan, District Co-operative Office, Sallyan an Ad-hoc Committee of Farmers Groups representing 29 PMA

Table 1: Summary of Major Market Development Activities, April 1, 1997 - November 30, 2001

S.N.	Program/Activity	Unit	Total Plan	Progress					Total	Remarks
				1997/98	1998/99	1999/00	2000/1	2001/02		
I	Group Marketing Strengthening									
	- Formation /strengthening of MGs(formed from PGs)	No.				10	13	15	15	
	- Marketing meetings of MGs and co-ordination meetings supported/attended	No.	1		as needed		127	51	178	178 meetings held in 2 years only
	- Marketing extension materials provided to MGs	No.	as needed						25	
II	Market information system (MIS)									
	- Radio broadcast of agri. price	Times								
	- Installation PIBs	No.	2	6	5/week	2	5/week	5/week	5/week	Sept. 1, 2000-Sept. 2001 PIBs updated annually
III	Trainings provided									
	- Market management/group marketing to MGs, farmers/Agro-entrepreneurs	No.	9 (241)	19 (462)	9 (224)		13 (304)	1 (25)		
	- Market management/group marketing to Project/I.A. staff	No.		1 (12)	1 (23)					
	- Agro-vet licensing	No.	1 (25)	1 (24)	1 (23)		1 (34)		4 (106)	
	- Post harvest handling	No.								
	o To Project staff/I.A. JT/JTAs	No.			1 (23)					
	o To farmers	No.								
	- Record keeping	No.			7 (M 187 + F 30)		11 (176)			
	Tour								1 (28)	
	- Market linkage, interaction, post harvest loss tour (Nepal)	No.	4 (87)				36 (387)	3 (24)		
IV	- Indian market tour	No.	1 (27)							
	- Agro-vet linkage tour	No.							1 (6)	
	Workshops									
	- Marketing workshop with PCO	No.	1 (100)							
V	- Seed marketing	No.	2 (195)							
	- Contact farming & marketing	No.	1 (45)							
	- Post harvest technology	No.			1 (80)					
	- MDP orientation	No.								
	- District level integrated	No.					1 (58)			
	- Short-term consultancies	No.					5 (324)	1 (59)		
VI	- Marketing/post harvest storage, etc.	No.	1 (1)	2 (2)	3 (6)					
	Market development publication	No.							32	

(Production Marketing Associations) were constituted. Constitution of the Committee as per Cooperative Law prepared by the Project was approved by the Committee. Several members of the executive committee were provided training on marketing management and were taken in the Market linkage tours in India and in Nepal.

Different extension leaflets on marketing were prepared and distributed to farmers to enhance knowledge on marketing.

- **Technology improved:**

New variety introduced: Hybrid tomato variety Manisha was introduced in the MARD Lumbini-Gandaki at the recommendation of the team that visited Solon area in Himachal Pradesh, India (where it was found very successful) during Indian Market Tour organized by the Project in April, 1997. This variety has become very popular among commercial farmers and successful (for winter season in particular) in MARD Lumbini-Gandaki and beyond.

- **Post-harvest handling improved:** Training and tour organized by the Project was helpful in improving the farmers post-harvest handling practices leading to decrease in losses of perishable vegetables like tomato in particular. Project provided (on rent) 176 units of plastic crates (received from local RADCO company, Tulsipur) to the commercial tomato growers of Kapurkot area and jointly with Agricultural Service Center, Kapurkot arranged distribution of these crates on rent to farmers/group members of the locality.

- **Agro-vets promoted**

Three new agro-vets were promoted at the initiative of the Project staff in Pyuthan. Bhandari

agro-vet of Bijuar, has occupied importance position in the Bijuar market. Agro-vet licensing training was conducted for 25 potential agro-vets.

B) Major Accomplishments in Lumbini-Gandaki in 1998-1999

1) Market Information System (MIS) Established and Strengthened

- MIS set up in new Project area. 6 Price Information Boards (PIB) installed with local users participation (of farmers groups, VDC, ASC, NGO, Pvt. Bus Syndicate Staff, MARD-TA Team) in MIS was arranged as needed.
- 15 HVC crops and livestock of three markets viz. Butwal, Pokhara and Narayangadh collected and disseminated twice a week. Wholesale prices, analysis of price trend, marketing cost estimate, etc also covered.
- One STC (Expatriate) was hired to develop "Practical MIS Program" in Project area and report submitted (Tech. Report No.31). Wholesale prices, analysis of price trend, marketing cost estimate, break-even yield etc also covered and analyzed for different crops, for different production pockets to markets etc. Based upon the suggestion necessary improvements in MIS are being made.
- Profile of the agro-entrepreneurs/seed-dealers of markets of Nepal and India was prepared. Preparation and distribution of "Seed, Agri-input Marketing Directory (Tech. Report. No.30). to farmers, agro-vets and related institutions.

2) **Market Linkage Tours/Visits**

- Three tours/visits were organized for 30 Commercial farmers line agency staff, project staff etc. of 3 production pockets (Kapilvastu, Rupandehi, Nawalparasi Districts) in markets of Butwal, Narayangadh. Tour Report prepared and distributed (MARD/L-G Tour Rep. No.14). Farmers were exposed to marketing practices, market opportunities, constraints of these markets, linkage established with wholesalers/commission agents of these markets.

3) **High Value Product (HVP) Marketing Training**

- 19 (one-day long) field level (OST) training conducted (jointly with horticulture extension training) to 462 farmers covering different aspects of marketing (Group Marketing, Post-harvest handling, Marketing management etc) in six production pockets.
- One (2-day long) Project level specialized training conducted for 24 local pesticide traders (agro-vets) and potential traders of production pocket. The trainees started three new agro-vets after the training in Nawalparasi and Rupandehi districts. Likewise, one new agro-vet was promoted in Rupandehi (Dhamauli) at the initiative of MARD.
- One(week-long) multi-disciplinary project level training (including Marketing, extension, nutrition components)was conducted to 12 motivators of the Project took part. Marketing topics included Group Marketing, Market Information System, Role of Motivators in Marketing Extension etc.
- One (3-day-long) training on "Marketing Management for promotion of Agro-Enterprises" took place on June 28-30, 1999 for 29 commercial farmers of 9 districts Lumbini/Gandaki and Rapti Zones. Topics on agri.extension technology, seed business management etc were included too.

4. **Short Term Consultancy**

- **Support to Butwal Horticultural Market Development:**

One STC (Expatriate) Mr. J.Diller was hired in October-November, 1998 for assesment and exploration of development of Butwal Horticultural Market on Public-Private Partnership basis. Report "An Action Plan for Butwal Horticultural market Development" Mard-Lumbini-Gandaki Tech. Report No. 28) circulated to related parties requesting investment in the Butwal Market Development Project. The findings of this report included the huge potential benefit to farmers ,traders, Butwal Municipality and the consumers that may result by the development of this Market as suggested in the Report.

- **Strengthening Market Information System (MIS):**

STC (Expatriate) Dr. F. Walters was hired in January-February, 1999 to improve the existing Marketing Information System of MARD/Chemonics. Based upon his suggestions (MARD L-G Tech. Report No. 31) necessary improvement in the MIS was made.

5. **Miscellaneous Activities**

5.1 **Support to Butwal Horticultural Market**

At the initiative of MARD-TA Staff an "Ad hoc Committee of the Vegetable Wholesalers of Butwal Haat Bazaar Market" was constituted. Constitution of the Committee was prepared jointly by the Butwal Municipality lawyer and related specialist of the Project.

5.2 **Support to solve seed supply problems**

Preparation and distribution of "Seed Input Marketing directory" to agro-vets, SEAN, groups and related persons. (Tech. Report. No. 30).

5.3 **Preparation and distribution Marketing Activities related of reports**

- Proceedings of Marketing Workshop (MARD/Chemonics/ Rapti- Workshop Report No.4 .May 22-23, 1998)
- Proceedings of Contract Farming and Marketing Workshop May 15, 1998.MARD/Chemonics Rapti Workshop Report No.10
- Status of Butwal Horticultural Market Development Program June 1999
- An Analysis of Agricultural Wholesale Prices of Major Commodities (1997/98).MARD Lumbini-Gandaki Tech.Report No.70.

5.4 **Interaction with related agencies**

Several meetings/interaction took place with related agencies like Agro-Enterprises Center, SEAN Marketing Development Division (DOA), SMI Project (FAO), Kalimati Wholesale Market Project (FAO), Rural Urban Project (UNDP), Wholesalers Association of Kathmandu, Pokhara, Narayangadh.

C) **Major Accomplishments in Lumbini-Gandaki in 1999-2000**

1. **Market Information System**

- Market information collection and dissemination in 6 production pockets continued with increased, coverage, contents and participation of different users and co-operators (Farmers groups, VDC officials, Bus syndicate staff, MARD/TA staff, ASC etc.)
- Five new Price Information Boards (PIB) s were installed in 5 production sites in addition to six PIBs already installed and used in last fiscal year. Users are participating in the dissemination of price information.
- 2 PIBs were installed at total cost by VDCs (Nawalparasi and Kapilvastu. In other districts joint cost sharing was done by MARD/TA and VDCs.

2. **High Value Market Product Training**

2.1 Marketing Management Training for local-agrovets. One Project level training on this conducted as planned. Existing (newly established agro-vets took part in the training).

2.2 Marketing Management training to commercial farmers (one -day ,on site level).

- Training on Group Marketing Management :9 OST conducted in 6 production sites. 244 Farmers were provided training on group-marketing.
 - Training on Post-harvest handling Management: 7 farm-level training conducted for farmers. Post-harvest handling expert from NARC and MARD Marketing Specialist conducted training to 187 farmers (30 females)
- 2.3 Training on Group marketing for project staff (Motivators/LA, JT/JTAs). (Project level 3 day-long)**
- One planned Project level training conducted by resource persons Marketing Officer of Sindhuwa Vegetable Co-operative and MARD/Marketing Specialist. (December 21-23, 1999)
 - 25 MARD motivators and JT/JTAs working in District Agricultural Development Offices from Lumbini-Gandaki and Rapti Zones participated in the training.
- 2.4 Training on Post-harvest Handling for Project Staff (Motivators JT/JTAs of Line Agencies.**
- One Planned Project level 3 day-long training conducted to 28 motivators and JT/JTAs of District Agricultural Development Offices of Lumbini-Gandaki and Rapti Zones. (December 1-3, 1999)
- 3. Workshop**
- 3.1 Post-Harvest Technology Workshop** was conducted with the co-operation/support of Nutrition Specialist, 4 short-term consultants (STC) including 3 expatriates from VOCA, UC Davis.
- Commercial farmers, agro-processors, Nutrition Demonstration Households, LAs etc. took part.
 - Post-harvest Technology Action Plan was prepared by the STCs
- 4. Short Term Consultancies**
- 4.1 Co-operative Seed Buying Consultancy**
- One local STC hired on Seed Buying Consultancy. Draft Report of Consultancy submitted.
- 4.2 HVC Post-harvest Technology Consultancy (Handling, Packaging etc)**
- 4 short term consultants including 3 expatriates from UC Davies, VOCA were hired and Action Plan prepared and distributed to related agencies and persons.
- 4.3 Co-operative/Group Product Selling Consultant.**
- An expatriate STC and MARD/TA Specialists jointly prepared "Market Demonstration Program Report" (MARD Lumbini-Gandaki Tech. Report No. 63.). This Report focused on ways of strengthening the Group Marketing approach of the Project in carrying market development activities. Based upon the findings of this Report guidelines were made and executed for the formation of the Marketing Group(MG) from several Production Groups(PG) of certain geographical area/cluster. Similarly, guidelines were developed for

strengthening the MGs and replication of the successes of the first 3 MGs supported by the Project in other production pockets and even in the areas outside the Project area by the Line Agencies.

5. Other Support Activities

5.1 Support to Butwal Hat Bazar: At the initiative of MARD/TA team Wholesalers/Commission Agents of BHM were organized into Association.

5.2 Strengthen Group/Co-operative Marketing

- Strengthen group marketing (Samuha Byapar) at potential production sites for agri-inputs H.V.C. etc. (as needed). **Establishment and strengthening of 10 Marketing Groups in six districts.** The project initiated new approach of forming Marketing Groups(MG) by comprising members of several (usually 6-8 production groups(PG) of certain geographical locality/area. The main concept behind this (besides other things) was enabling the farmers to collect/assemble at least truck-load of farmers produces and transport it to distant market at low cost per unit. Most of these PGs were established at the initiative and with the support of TA Team. Several interaction, meetings were organized with the group members, traders, local people before the formation of these MGs. Similarly marketing extension materials/ handouts were provided to the farmers during training on marketing management. One milk and vegetable based cooperative at Gaindakot, Nawlaprasi was dissolved to focus only on milk marketing.
- **Group Market Linkage Tours/Visits**
Six Market linkage tours/visits were conducted for 85 commercial farmers/members of farmers group-marketing committees, Project and Line Agency Staff of six project districts at wholesale markets of Butwal, Pokhara and Naryangarh . Linkage made with Wholesalers and participants were exposed to marketing practices, constraints and opportunities.
- **Co-ordination with related agencies**
Necessary linkage and co-ordination being made with related agencies like line agencies, Agro-enterprise Centre, Kalimati Wholesale Market project in exchanging price information and consultation in related matters.

D) Major Accomplishments in 2000 - 2001

1. Group Marketing strengthening

- **Formation of New Marketing Groups (MGs) :**13 Marketing Groups (MGs) were established /strengthened representing 62 Production Groups(PG) of above 1000 house holds(HH). These MGs included 9 MGs established in the previous year. This was done as part of implementation of the Market Demonstration Program prepared by the Project consultants including one expatriate. Several meetings, visits were made before and after the formation of these MGs.
- **Meeting with MGs:** 108 monthly/regular meetings of MGs held actively participated by Marketing Groups (MGs) and project staff to strengthen these MGs..
- **Coordination Meetings:**19 co-ordination meetings (marketing groups, wholesaler, transporter, VDC officials and LA) were done to promote group marketing; agreements for collection and sales of produces were made with traders/transporters etc during these meeting as needed.

- **Material Support to MGs:** Supported 11 MGs with weighing balances and plastic tents (1 set for each MG) as demonstration to these groups ;These materials proved very motivate and useful to the MGs in conducting group marketing.
- **Extension Material to MGs:** marketing extension/publicity leaflets/materials prepared and distributed to MGs and PGs regularly.

2. Strengthening Linkages with Outer Markets and Market Out-let Development

- **Market Linkage:** 14 market linkage tours were organized for 174 commercial farmers of MGs/PGs. These tours together with the interaction tours were very useful to the newly established MGs in starting group marketing and taking their produces to distant markets.
- **Interaction tours/visits :** 17 interaction tours/visits were organized for 179 commercial farmers of MGs/PGs;

3. Market Information System(MIS)

- Market information collection and dissemination in 6 production pockets with users participation continued;
- MARD/TA jointly with Regional Agriculture Directorate/DOA started disseminating of wholesale prices of high value crops of three markets (Pokhara, Butwal and Narayangarh) five days a week from Radio Nepal, regional station, Pokhara from September 1, 2000. Commercial farmers of the region was highly benefitted from it;
- Price dissemination through **Price Information Boards (PIBs)** installed at different sites continued. 2 PIBs were installed, at Pokhara wholesale market jointly by MARD/TA and Pokhara Wholesale Market Management Committee (PWMMC). The PWMMC is co-operating with MARD/TA in collection and dissemination of price information five times a week;

4. Marketing Skill/Entrepreneurship Development :

- **Training on Group Marketing Strengthening:** 14 one-day long on site trainings (OSTs) on group marketing conducted for 304 farmers;
- **Post -harvest Handling Training:** 11 OSTs on on post-harvest handling conducted for 176 farmers of MGs/PGs.
- **Post-harvest Losses Assessment Tours:** 5 post harvest loss assessment tours organized for 34 commercial farmers of MGs/PGs;
- **Agro-vet licensing training :** 1 Agro-vet licensing training was conducted for 35 potential agro-entrepreneur commercial farmers;

5. Other Supportive Activities:

- organized jointly HVC Production and Marketing Workshop with MARD PCO at RATC, Bhairahawa;
- 5 district level workshops (integrated marketing, technology and extension and nutrition) organized in co-operations with respective DADOs;
- Completed mini-study on "Development of Criteria for Collection Center Development" (MARD L-G Technical Report No.86.1) by a team of experts from MARD/PCO, Line Agency and the MARD/TA Team. The findings of this study were very helpful for making selection of collection center; for construction of low cost sustainable collection center in the production pocket on partnership basis with different parties including the user-farmers groups. It was found that even simple low cost collection shed (with weighing scale and plastic/corrugated roof shed) can effectively help collection and sales

of high value commodity of farmers groups if they are located at suitable places, properly managed and if there is sufficient production in the area..

- several training/tour and technical reports on group marketing programs published and distributed to concerned parties;
- frequent field visits were made in project pockets to provide necessary support and follow-up to market development activities; and
- did necessary co-ordination and technology sharing with concerned LAs.

E) Major Accomplishments in 2001-2002 (as of November, 2001)

1. Group Marketing Strengthening

- Two new marketing groups were formed in Kaski and Nawlaparasi making the total MGs 15 in the Project area.
- MGs are selling their production through group marketing in the local as well as in the distant markets.
- MGs have conducted more than 19 group meetings with the participation of the MARD staff. Likewise, 2 coordination meetings were conducted to strengthen the linkage between the wholesalers of major markets and the MGs.
- Marketing extension material set was provided to MGs to help strengthen group marketing.

2. Market Outlet Development

- Weighing scale set was provided to the MG of Dumre, Palpa. Likewise support material (Plastic sheets, stationery, etc) were provided to MGs as planned.
- Three market linkage tours were organized for 20 MG members and LA staff of Kaski, Palpa and Syangja covering markets of Pokhara, Butwal, Narayangarh, Taulihawa etc. Similarly one tour was organized for 6 wholesalers of Butwal and Pokhara Wholesale markets to visit production sites and interact with the commercial producers of Palpa Syangja and Kaski pockets
- One tour was organized for the Agro-vets as planned. 25 Agro-vets took part in the tour program.

3. MIS Strengthening

Price Information Boards (PIB) were updated as planned.

4. Marketing Skill/Entrepreneurship Development (Training on Marketing)

- One training on Record Keeping was provided to the 28 key members of the 15 MGs operating the Project area.
- One training on Marketing Management was provided to the 25-MG members of Rupandehi pocket as planned.

5. Miscellaneous

Three new agro-vets established in MARD area at the initiative of Project.

IV) RESULTS OF MARKET DEVELOPMENT ACTIVITIES

Based upon the monitoring surveys conducted by the project the parameters like % of production marketed, marketed value and marketed value rank of key crops focussed by the project like Potato, Cauliflower, Cabbage, Tomato or PCCT showed following qualitative changes. (Table - 2, 3) because of Project activities.

Table 2. High-Value Crop Production and Marketing in Project Pockets, 1998 - 2001

1998 Benchmark Survey of HV Crops in All MARD Pockets [a]

	Hectares	Tons	Yield (Tons/Ha)	Farm Price (Rs/Kg)	Production Value Rs '000	% of Production Marketed	Marketed Value Rs '000	Marketed Value Rank
Ginger	135	1,400	10.37	13.70	19,164	79	15,147	1
Potato	700	3,022	4.32	7.50	22,786	52	11,895	2
Cauliflower	156	1,463	9.37	10.80	15,864	73	11,634	3
Tomato	164	1,326	8.09	11.00	14,624	79	11,609	4
Lentil	1,148	632	0.55	18.00	11,385	72	8,242	5
Mustard seed	2,151	766	0.36	25.90	19,847	38	7,479	6
Cabbage	102	1,070	10.52	7.10	7,636	76	5,829	7
Banana	59	586	9.86	10.30	6,035	81	4,888	8
Orange	90	419	4.66	11.10	4,659	94	4,381	9
Brinjal	61	826	13.48	6.40	5,254	71	3,750	10
...
Total HV Crops	6,108	17,653	2.89	10.10	177,608	62	110,745	...
Total Non-HV Crops	36,368	83,674	2.3	8.91	745,369	27	204,333	...
Total PCCT	1,122	6,881	6.13	8.85	60,910	67	40,967	...
Million US \$ @ Rs. 65					0.94		0.63	

[a] MARD/Lumbini-Gandaki Performance Benchmark Data for the 2nd Project Year, 1997-98. MARD/Lumbini-Gandaki Technical Report No. 26, Nov 1998.

In the benchmark year 1998-1999, % of marketed for PCCT was Potato 52%, Cauliflower 73%, Tomato 79%, Cabbage 76% respectively while some thing in 2001 was Potato 54%, Cauliflower 80%, Tomato 91%, Cabbage 78%. It shows that there was huge increase in marketable surplus due to increase in production. And the farmers were able to market the surplus production in the local or distant markets. This also indicates that the marketing system of the farmers was able to cope with surplus production market their surplus produces effectively. The total marketed value of these commodities for the benchmark year and year 2001 showed. Tomato Rs. 75,580 thousand(in 2001) compared to Rs. 11,634 thousand (in 1998).

Cauliflower worth Rs. 31,301 thousand was marketed in 2000-2001 compared Rs. 11,934 thousand in 1997-1998. The marketed value for cabbage was Rs. 14,709 in 2000-2001 compared to

**Table 3
2001 Monitoring Survey of HV Crops in All MARD Pockets [b]**

	Hectares	Tons	Yield (Tons/Ha)	Farm Price (Rs/Kg)	Production Value Rs '000	% of Production Marketed	Marketed Value Rs '000	Marketed Value Rank
Tomato	325	7368	22.65	11.23	82,753	91	75,580	1
Potato	728	10,673	14.66	6.15	65,604	54	35,570	2
Cauliflower	306	4949	16.15	7.88	39,008	80	31,301	3
Cucumber	135	2885	21.32	9.37	27,035	69	18,721	4
Ginger	171	1419	8.30	15.92	22,597	74	16,685	5
Radish	286	4787	16.74	4.87	23,319	66	15,326	6
Cabbage	203	4364	21.50	4.34	18,955	78	14,709	7
Mango	181	1987	10.98	11	21,851	62	13,549	8
Banana	144	2528	17.56	9	22,023	61	13,388	9
Onion	134	2056	15.39	6.68	13,740	50	6,898	10
...
Total HV crops	7,272	62,204	8.55	8.78	545,913	61	331,564	...
Total Non-HV Crops	33,877	79,253	2.34	7.83	620,499	30	188,613	...
PCCT Total	1563	27,354	17.50	7.54	206,319	76.2	157,160	...
Million US \$ @ 74.40					2.77		2.11	

[b] MARD/Lumbini-Gandaki Performance Monitoring Data for the 4th Project Year, 2000-2001. MARD/Lumbini-Gandaki Technical Report No. 95, July 2001.

Rs. 58,29,000 in 1997-1998. Likewise for potato the marketed value was Rs. 35,57,000 compared to Rs. 1,18,95,000 in 1997-1998. So there was huge jump in the value of commodity marketed in these years.

The other parameter like total production in the same years also showed huge jump. Where as the farm price in these two years showed considerable decrease in 2001 compared to the benchmark year survey.

This indicates that due to huge increase in production local markets were saturated or over supplied with farmers produces leading to fall in price. This phenomenon is normal and such situation compels farmers to find alternative markets and marketing channel. The increase in marketed %, marketed value indicated that the farmers were able to take their produces to distant markets. This also indicates that farmers group marketing has been able to cope with the new situation.

The performance figures of 15 marketing groups promoted by the project shows the increased capacity of these farmers marketing institution (Table 4) 15 marketing groups promoted by the project (although at different stages of development) could market 1976 mt. vegetable/fruits through group marketing worth Rs. 21 million in from July 2000-2001 September. These marketing groups are serving (directly/indirectly) 84 Project assisted production groups comprising 1483 house holds (Table-4). These groups are also marketing produces of other farmers of the same area as well as from other places/districts.

One market group of Madan Pokhara Palpa namely Madan Pokhara Vegetable Production and Marketing Group sold 60 mt. ton vegetables valued Rs. 5265 in different markets like Butwal, Tansen etc. through group marketing during the period July 2000-2001. This MG has already registered as a cooperative in 2001. This MG could sell produces of the Group Members as well as Non-Group Members of sme VDC and other districts.

Similarly, Lumbini Production and MG of Khudabagar and Dayanagar Rupandehi sold their produces in different markets of Butwal, Bhairahawa etc. through group marketing. The marketing group of Khudabagar sold 381 mt. ton valued Rs. 3352,000.00 and another MG of Dayanagar sold 163 mt. ton valued Rs. 868,000.00 in different markets during the period July 2000-July 2001. These three MG are saling their produces using collection sets constructed by the group resource at Butwal Haat Bazar.

The marketing group members of Kapilvastu Municipality in Kapilvastu name Siddhartha Vegetable MG sold 98 mt. ton vegetables worth Rs. 778,000.00 through group marketing in the Taulihawa and Local markets as well as in the Indian Boarder market like Khunwa, Saratgadh. This group also used collection set constructed with group resource at Taulihawa Haat Bazaar for the collection and sale of group produces.

Similarly another market group of Triyasi, Syangja, namely Triyasi Vegetable Marketing Group sold 385 mt. ton vegetables worth 6905,000.00 (mainly tomato) at the collection center at Triyasi. This group also sold produces of the group memembr as well as non-groups member of the areas.

Many farmers are selling their produces directly without forming marketing groups.

Table 4. Status of Marketing Groups (As of July 2000 - Sep. 2001)

Name of District	Name of Marketing Group/Date of Establishment	No. of Production Groups Covered	No. of HH Served	Location of Marketing Group	Major Market Centers	Volume Sold by Marketing Group (July 16, 2000 - July 16, 2001)	
						Qty (Mt)	Value (Rs. '000)
Rupandhi	Lumbini Production and Marketing Group (27-6-2056)	6	109	Khudabagar VDC	Butwal, Local Haat bazars, Bhairahawa	380.71	3351.7
	Lumbini Production and Marketing Group (2057-7-1)	6	120	Chapiya, Dayanagar	Butwal Local Haat bazar, Bhairahawa	163.4	867.8
Kapilvastu	Siddhartha Veg. MG (2057-3-13)	3	48	KNP	Taulihawa, Local Haat bazaars	97.5	779.25
	Nigali Veg. Marketing Group (2057-1-29)	4	78	Jagdishpur	Taulihawa Local Haat bazaars	19.7	151.6
	Dhankauli Veg. Marketing Group (2057-1-28)	3	37	Dharpur	Taulihawa Local Haat bazaars	NA	NA
Nawalparasi	Women Veg. Production and Marketing Group (2057-4-20)	3	85	Shitalnagar	Narayangadh Butwal Local Markets	18.06	77.6
	Rajahar Veg. Production and Marketing Group (2057-2-27)	2	33	Kujauli	Local Markets	21.72	169.6
	Beldiah Veg. Production & Marketing Group (2058-4-32)	9	152	Beldiah	Local Markets/ Narayangarh	NA	NA
Palpa	Madanpokhara Veg. Production and Marketing Group (2056-5-10)	5	74	Madanpokhara-8	Butwal, Bhairahawa Local haat bazaar	660.2	5265.3
	Shramjiwi Veg. Production and Marketing Group (2058-2-10)	6	77	Dumre Masyam	Butwal	10	77
Syangja	Triyasi Veg. Producers Marketing Group (2056-5-2)	7	146	Triyasi	Butwal Pokhara Local markets	385.13	6904.6
	Andhikhola Veg. Marketing Group (2057-3-23)	6	71	Bayarghari Dahathum	Butwal & Pokhara Local markets	57.04	636.4
Kaski	Bagmara Fruits and Vegetable Marketing Committee (2057-1-7)	7	192	Bhagwatichautara-4	Pokhara Local Markets	140	2424.6
	Lamgadi Krishi bazar Samuha (2057-4-17)	4	61	Lamgadhi	Pokhara Local Markets	23	296.3
	Lekhnath Agr. Marketing Group (2058/6/13)	13	200	Dhalepipal, Lekhnath	Pokhara/local market	NA	NA
Total	15	84	1483			1976.46	21001.75

Note: Sold quantity and value available for Kapilvastu, Syangja and Nawalparasi up-to 2001.

V) MAJOR IMPACTS OF MARKET DEVELOPMENT ACTIVITIES

A) Major Impacts in Rapti Area in 1997-1998

1. Increase in demand and sales of local production

- Several tours conducted by the project to help establish farmers linkages with the big markets like Butwal, Narayangarh were helpful in achieving their objectives like increasing demand and sales of the production of Project areas. Commercial farmers of Sallyan in particular were found bringing their produces to Butwal markets on their own even after the departure of TA Team from Rapti area. Similarly farmers from Bijuar, Pyuthan were found bringing their produces to Butwal market on their own. This helped to increase demand for local production leading to fair /reasonable price in the local market.
- The efforts of the MARD-Chemonics were greatly helpful in developing the then newly established Kapurkot Hatbazar. Efforts of the Project help bring more traders from more markets to Kapurkot. Similarly, establishment of hatbazar at Bizuar at the initiative of the Project was helpful in shipping out surplus produces to Butwal market besides creating local market for it. This helped to increase demand for local production leading to fair /reasonable price in the local market

2. Post harvest Technology Improved leading to decrease in cost and loss/ per unit and increase in the competitiveness of local produces in the markets.

- Several tours (local and Indian markets) was helpful in exposing farmers to improved post –harvest handling technology/practices besides exposing their own shortcomings in packaging, handling, transporting, storing of perishable vegetables. It also helped farmers to know about the variety /type of produces most demanded in the market. Farmers became aware of the high losses (about 40% lossess in case tomato while transporting from Kapurkot market to Butwal hatbazar as well as Narayangarh market) occurred by the use of local variety tomatoes compared to hybrid variety like Nawin, Nutan (which were promoted by MARD/TA far and wide).
- Hybrid tomato Manisha variety introduced and popularized by MARD/TA in Lumbini-Gandaki was actually introduced after the strong recommendation of the MARD TA India Tour Team (in 1997) which visited at a progressive farmers Farm at Solon, Himachal Pradesh. This variety has been found very suitable for winter season. Similarly the plastic crates provided by the Project to the farmers of Kapurkot area was helpful in enhancing the need of improved packaging materials/containers for tomato in particular.

3. Contractual Seed Production Promoted leading to increase in demand and sales of vegetable seed produced in the project area.

- The volume of vegetable seeds demanded in two Seed Marketing Workshops organized in Rapti were 121 mt in the workshop organized on October 22-23, 1997. Similarly production estimation made was 109 mt in the Marketing Workshop organized on May 22-23, 1997. In the Contract farming Workshop organized on May 15, 1997 the demanded by a Birgunj based Agro-Processing Industry quantity of improved maize was 20000 mt. A contract of 500 mt. for supply of improved maize was made between the farmers and the Agro-Industry.

B) Major Impacts Market Development Activities In Lumbini-Gandaki In 1998-2002

1. Improvement in the Competitiveness of the produces as shown by increase in demand and sales of hvc produced by the Project supported farmers groups.

- Formation of Marketing Group (MG) comprising farmers/members of couple of farmers Production Groups (PG) of certain cluster/site/VDC etc and conducting group marketing by the farmers representatives themselves to sell the surplus hvc produces of the farmers in the local and distant markets, has been a remarkable achievement of the Project leading to increase in demand and the sales of farmers produces .
- Several MGs have been successful in conducting group marketing (group collection, transportation, group bargaining, use price information, group input purchase etc). MGs sold 1977 MT of HVC worth more than Nrs. 21 million during FY 2000-01 alone.
- Marketing groups/production groups are increasingly buying their inputs/seeds through group marketing leading to quality seed supply, cheaper price ,reduced cost per unit in transportation.
- Another important aspect of MARD Marketing Approach has been construction of collection and sales stalls at different important markets by the MGs themselves using their own resources (without any financial support from the Project). Sales stalls (made of simple low cost bamboo structure) at Butwal Haat Bazaar, Taulihawa Haat bazaar, Bazaar, Triyasi etc are important example of successful strategy of MARD leading to increased sales as well as achieving sustainability of the program. This low cost model can be easily replicated by other institutions without heavy investment or using local resources.
- MARD activities like market linkage tours/visits, active participation in the regular meetings of MGs and wholesalers/commission agents by the Project staff etc have greatly helped strengthen MGs and their capacity to understand /exploit market opportunities/establish linkages with the wholesalers of main markets.
- Marketing groups are found to be taking their produces to different markets on their own AS THEY are well familiar with the market situation opportunities and practices. This has helped farmers increase their sales and income.

2. Market Information System (MIS) Strengthened leading to market driven production planning.

- Establishment of MIS useful to the commercial farmers has been one of the achievements of the Project. Installation of Price Information Boards(PIB) with price information (past price trend and current wholesale price of major markets)as well as technology package suitable to market windows at strategic places/markets has been helpful in improving production -market timing,selection of best market , bargaining power of the MGs etc. 11 PIBs installed at different places, price information broadcast from Radio Nepal, Regional Station has helped increase market transparency/ increase the awareness of MGs/farmers about the importance of market information.

3. Post-harvest handling Practices Improved (through training /visits) leading to reduction in unit marketing costs/losses and increase in competitiveness.

Several training's/visits conducted by the Project has led to improved knowledge/skill of the farmers related to post-harvest handling losses (in handling, packaging, transportation, storage etc (of tomato, cauliflower, cabbage, etc.). More and more farmers are using improved packaging containers like plastic crates, improved containers, protective packaging

materials, improved storage practices, extra care during transportation, proper grading and sorting etc.

4. Promotion of Agri-input sellers (agro-vets)

MARD has been successful in promoting local agro-vets an important means of improving supply of improved seeds/agri-inputs in the project area. Several training/visits were organized leading to establishment of new agro-vets as well as strengthening the existing local agro-vets. Above 50 new and existing agro-vets have been strengthened during the project period.

5. MARD Market Development Programs Replicated by Line Agency

- Line Agencies in the Project area are replicating many of the programs successfully implemented by the TA Team in the Project area. TA Team is providing technical support to LA on need basis to carry out marketing programs.
- Line agencies are installing MARD designed Price Information Boards (PIB) at different places..
- Similarly in line with the MARD TA approach several training, tours, material supports, etc are being provided by Line Agencies to the Marketing Groups formed by LA similarlar as TA .All these replications are indication of the continuity of the approaches,/strategies of market development activities initiated by MARD TA Team in Lumbini-Gandaki.

VI) MAJOR PROBLEMS ENCOUNTERED IN RAPTI AND LUMBINI-GANDAKI

- **Lack of Fund for Hardware activities**
The fact that MARD/TA does not have construction/hardware provision/fund made it unable to provide, free of charge materials like plastic crates, weighing machines, mini-trucks/vehicles to the farmers nor could it construct heavy structure for market shades or rural roads to link market, which many farmers and Line Agencies staff often thought as compulsory component for long term market development This thing seemed to have often created some sorts of disenchantment among the partners/farmers in carrying out market development programs. Actually the Project did not believe this type of concept/approach which focussed on such free distribution of materials will help develop sustainable market development after the departure of the Project. Such attitude of farmers and line agencies often overshadowed the benefits and achievements of the non-hardware sustainable approach of the Project.
- **Lack of Farmers Marketing Institutions/Feeling of Group Approach among the Farmers**
Although in paper there were hundreds of farmers production groups in the Project area actually there were very few functional farmers groups. Marketing groups were virtually non-existent before the commencement of MARD. Lack of marketing groups, almost absence of group feeling among the farmers demanded intensive efforts of the MARD staff to implement market development activities.
- **Lack of adequate Markets/Collection Centers**
There were very few periodic local market like Kapurkot in the Project inner area. There was lack of hatbazar type markets which could be used as collection center as well as shipping out center for the locally produced surplus vegetables.

- **Lack of Marketing Information**

There was lack of information like price trend, traders wholesalers number contact address in major and local markets, demand and supply information of major markets etc. Thus under such situation MARD TA had to develop all most all aspects of Marketing System to meet Project objectives.

- **Inadequate Full-time Market Extension Staff**

MARD TA Team had one full time Marketing Specialist and one Market Officer (till 2000) stationed at Butwal to plan, support, supervise the implementation of marketing activities conducted at field level by field staff most of whom were basically of agricultural background having inadequate marketing extension experience. The inadequacy of full-time market extension staff (particularly at field-level) was often highly felt in such Project like MARD which has challenging market development objectives and goal. Because of this factor often crucial marketing activities were overlooked, field staff could not provide adequate follow-up support field staff could not pay adequate attention when they had other important assignments.

Security Issue:

The disturbing political environment in the Project area also to some extent hampered the smooth and effective implementation of the Project activities.

VII. LESSONS LEARNED FROM PAST EXPERIENCE

A. Lessons Learned From First Annual Work Plan (1997-1998) Experience

- Establishment of Cooperative and group-marketing programs requires far more intensive technical assistance to not only create the programs, but to provide extended follow-up support than envisioned in the design of MARD or realized in past Rapti Projects;
- For marketing tours to be successful (both in Nepal and India), the groups have to be small for logistical management, homogeneous in experience and interests and selected with specific linkages to Project objectives;
- Plastic shipping crates are one of the most significant factors in reducing marketing costs of horticultural product (through reduced spoilage and wasted shipping space); and
- Timing of production and selection of appropriate varieties are some of the most important production decisions that determine market demand for high-value commodities.

B. Lessons Learned From Second Annual Work Plan (first project year in Lumbini-Gandaki second project year) 1998/1999 Experience.

- value commodity marketing can be more effective compared to individual marketing (for small farmers with small marketable surplus, in particular) for taking their produce to distant markets;
- promotion of group marketing needs adequate technical and extension support;
- plastic packing crates can greatly reduce post-harvest losses and marketing costs when transporting perishable high-value commodities to distant markets;
- installation and maintenance of price information boards at strategic local marketing points provides timely flow of market information and increases marketing transparency and bargaining power of farmers;

- specialized training (field level/project level) is needed to impart necessary marketing knowledge and skills to farmers; and
- market visits to main markets for farmers are effective means of exposing them to market opportunities/constraints and establishing business linkages.

C. Lessons Learned From Third Annual Work Plan (1999/2000) Experience

- high-value commodity group marketing can be more effective compared to individual marketing (for small farmers with small marketable surplus, in particular) for taking their produce to distant markets;
- promotion of group marketing needs adequate technical and extension support;
- plastic packing crates can greatly reduce post-harvest losses and marketing costs when transporting perishable high-value commodities to distant markets;
- installation and maintenance of price information boards at strategic local marketing points provides timely flow of market information and increases marketing transparency and bargaining power of farmers;
- specialized training (field level/project level) is needed to impart necessary marketing knowledge and skills to farmers group members to encourage them to group marketing;
- market visits to main markets for farmers are effective means of exposing them to market opportunities/constraints and establishing business linkages;
- local agro-vets can be effective in supply of production inputs; and
- price information of regional markets are necessary for producer marketing groups to help them make decisions where/who to market their produce.

D. Lessons Learned From Fourth Annual Work Plan (FY 2000/2001) Experience

- group marketing of high-value commodity group marketing can be more effective compared to individual marketing (for small farmers with small marketable surplus, in particular) for taking their produce to distant markets;
- successful promotion of group marketing required adequate technical and extension support;
- plastic packing crates greatly reduced post-harvest losses and marketing costs when transporting perishable high-value commodities to distant markets;
- installation and maintenance of price information boards at strategic local marketing points provided timely flow of market information and increased marketing transparency and bargaining power of farmers;
- specialized training (field level/project level) is needed to impart necessary marketing knowledge and skills to farmers group members to encourage them to group marketing;
- market visits by HVC producer farmers to regional and to main markets effectively exposed them to market opportunities/constraints and helped them in establishing business linkages;
- promotion of local agro-vets were found effective in supply of production inputs;
- price information of regional markets are necessary for producer marketing groups to help them make decisions on where/who to market their produce.
- Local market will be saturated and the price in local markets will fall with the increased supply of vegetables resulted by increased local production.
- Farmers need to be organized in group to assemble and transport the surplus HVC vegetables through group marketing to distant big markets.

- Regular contact/consultation to MGs; participation at MGs monthly meetings by field staff are essential for strengthening group marketing.
- Post harvest handling training/post harvest loss assessment tours are very helpful in minimizing post harvest losses and improving farmers marketing practices;
- Establishment of sales outlets by MGs at major markets/collection sites helped promoting group marketing, improving group marketing practices, and increased contacts with buyers/wholesalers of other major markets;
- Broadcasting of price information news bulletin through Radio Nepal, Pokhara increased/improved market information transparency and increased coverage in project and non project districts;
- local Agro-vets played important role in supplying quality seeds in time;
- promotion of local agro-vets were found effective in supply of production inputs;
- Farmers located close to the big markets with good transportation facilities tend to prefer individual marketing to group marketing.

E. Lessons Learned From Fifth Annual Work Plan (FY 2001-2002, as of December, 2001)

Experience

- For the smooth continuation of the Project activities (after the termination of the Project) there is need of joint participation by TA and the Line Agencies staff in the implementation of the Project activities couple of months before the Project termination.
- Uncertainty in the life of the Project can adversely affect the effective implementation of the Project activities by the Project staff;
- Disruption/delay in the planned flow of Project fund to fulfil the planned/ committed activities made by the Project to the farmers adversely affect the effectiveness of the activities;
- Plastic packing crates greatly reduced post-harvest losses and marketing costs when transporting perishable high-value commodities to distant markets;
- Establishment of sales outlets by MGs at major markets/collection sites helped promoting group marketing, improving group marketing practices, and increased contacts with buyers/wholesalers of other major markets;
- Successful continuation /promotion of group marketing of new marketing group required adequate technical and extension support by field staff (in particular) at the harvest time;
- Registration of the Marketing Group in cooperative after adequate operation as group or only after understanding the importance of group marketing by the group members help enhance sustainability of the Marketing Group.

VIII) CONCLUSION AND RECOMMENDATIONS.

Based upon the experience of MARD TA Team in Rapti and Lumbini-Gandaki Zones following conclusion is drawn.

A) Conclusion:

1. Institutional development of farmers

Sustainable production and marketing of farmers HVC can be attained by farmers through establishment of farmers production and marketing institution. That farmers

institutions "**marketing group**" formed by couple of HVC production groups of certain area. Such market group can collect truck load of produces and which can be transported to distant market. In the absence of truck load of produces the cost/unit of transportation will be high leading to loss in competitiveness of farmers produces in the competitive market. Majority of MGs in MARD TA are formed by joining the members of 6-8 production groups comprising 60-100house holds(HH). Registration of the MG as cooperative has to be done only after MG members understand the importance of group well and demand help for registration.

2. **Strengthening /Capacity building of farmers institution** - Knowledge and skill of management and group marketing is necessary for the marketing group members to carry on their producer and marketing activities profitably and independently with their own resources.
3. **Develop more market outlets and better linkage with larger markets.**
 - Experience of MGs show that local market cannot observe surplus production, which result because of improved technology leading to increased production. This leads to oversupply or glut in the local market causing fall in local market price. In order to avoid such situation and expand demand, increase sales with increase in income there is absolute need of developing more market outlets and better linkages with larger markets.MARD TA experience has shown that the construction of low cost shed and use of plastic shed, use of weighing sales at the shed etc can effectively serve as collection center and sales shed for groups production. In order to avoid such situation and increase sales with increase in income there is absolute need of developing more market outlets and develop better linkage with large markets.
 - Similarly, construction of such low cost stall at market center hat bazaar can serve as collection center as well as sales stall for farmers production. The experience of MG of Palpa and MG of Dayanagar VDC and Khudabagar VDC at Butwal Haat bazaar is an example for it. MG of Kapilvastu Municipality has been able to maintain high price for their produces through group bargaining. This MG often played the role of price maker in the haat bazar, and often exported its (groups produces) to border markets in India on several occasion. The relationship /rapport /linkage between farmers and the vegetable wholesalers was greatly cemented by taking MG members to wholesalers at the markets and taking the wholesalers at farmers production pockets during the crop season.Dozens of market linkage tours/visits organized by the Project helped build this linkage , expose to market opportunities ,constraints etc.
4. **Improve post-harvest handling practices**
 - Improvement in handling practices was found very essential to reduce losses of such vegetables like tomatoes during transportation, as well as for reducing cost per unit of transportation. This helped farmers produce maintains high quality leading to higher prices and increase in competitiveness of the produces in the market.
 - Scores of training /tours/visits organized by the Project brought changes in the attitudes /awareness of the farmers leading to increasing use of plastic crates by many farmers, increase in taking extra care while picking,grading,sorting, using appropriate packaging materials, taking extra care in loading unloading etc.

5. Promotion of agro-vets/agri-input sellers

Establishment of new local agro-vets and strengthening of existing agro-vets greatly helped improve supply of different seeds and inputs in the Project area..

6. Develop Market Information System

Marketing begins from the very moment when a farmer decides what to plant. MARD MIS was installed mainly to benefit farmers decision making process. Installation of PIBs at different strategic points, Price Information Broad(PIB) broadcast of price information from regional radio station of Radio Nepal, Pokhara greatly helped improve market transparency in the Project area. The replication of PIBs at different points by DADOs is an encouraging thing.

B) Recommendations

Based upon the experience and lessons learned in Rapti and Lumbini-Gandaki zone a holistic package of marketing programs is recommended. One of the reasons of failures of several marketing programs/activities in the past have been the lack of holistic approach or in most case marketing activities were implemented as an isolated activity.

1. Strengthen MIS

Marketing information comprising price, price trend, marketing costs, market demand, supply data, etc need to be regularly collected, processed, evaluated, analyzed and disseminated to the concerned users regularly through radio, newspapers, PIBs. MARD type of PIBs need to be installed /updated at strategic points.

2. Strengthen Group marketing/Cooperative Marketing

Formation and strengthening marketing groups at different production pockets through regular training, visits, attending and facilitating groups meetings etc need to be done. Providing material support like weighing machines, plastic sheets plastic crates to selected groups for demonstration at reasonable cost sharing basis necessary too.

3. Develop more Market out-lets and linkages with Larger Markets

Organize mutual visits/ market tours for farmers and wholesalers at each others places(market ,production pockets);

4. Development of Collection Centers/sites

Encourage /facilitate MGs to organize collection points using MARD type simple low cost sheds at the production pockets. Encourage /facilitate MGs to construct MARD type sales stalls at the local major markets;

5. Improve Post -harvest handling Practices;

Training /tours to be conducted to the farmers to increase awareness/skill/knowledge of farmers on post harvest handling of perishable commodities specially like tomatoes, cauliflower etc.

6. Promotion of Agri-input sellers/Agro-vets

Training to be conducted for potential and existing agri-input sellers on technology/extension, management etc. to be helpful to the commercial farmers.

S. N.	Program/Activity	Unit	Total Plan	Progress												Remarks			
				1997/98			1998/99			1999/00			2000/01				2001/02		
				No.	M	F	No.	M	F	No.	M	F	No.	M	F		No.	M	F
5. Tours/Visits		No.	64	5	104	3	20	6	78	36	387	6	60	56	649				
5.1 Indian market tour (project level)		No.	1		27									1	27				
5.2 Market linkage tour (district level)		No.																	
★ Project level		No.	1	34	4	38								1	34	4	38		
★ Salyan		No.	2		35									2			35		
★ Pyuthan		No.	1		4									1			4		
★ Dang		No.																	
Sub-total		No.	4	34	4	77								4			77		
★ Nawalparasi		No.	6			10	1	14	1	7	3	10		3			34		
★ Rupandehi		No.	6			1	1	15	3	26		26		5			41		
★ Kapilvastu		No.	7			10	1	15	4	67		67		6			92		
★ Palpa		No.	6			1	1	12	2	19	1	8	2	10	4		41		
★ Syangja		No.	6			1	1	12	2	12	1	2	3	5	4		29		
★ Kaski		No.	6			1	1	10	2	40	1	9		4			59		
Sub-total		No.	37			20	6	78	14	174	3	10	5	24	26		296		
5.3 Interaction Tour/visit (FG+TA), district level		No.	18					17		179				17			179		
★ Nawalparasi		No.	4					3		36				3			36		
★ Rupandehi		No.	4					4		48				4			48		
★ Kapilvastu		No.	4					3		38				3			38		
★ Palpa		No.	2					2		19				2			19		
★ Syangja		No.	2					3		20				3			20		
★ Kaski		No.	2					2		18				2			18		
5.4 Post harvest loss assessment tour (district level)		No.	6					5		34				5			34		
★ Nawalparasi		No.	1					1		10				1			10		
★ Rupandehi		No.	1					1		4				1			4		
★ Kapilvastu		No.	1					1		6				1			6		
★ Palpa		No.	1					1		8	2	10		1			10		
★ Syangja		No.	1					1		4				1			4		
★ Kaski		No.	1																
5.5 Traders tours/field visit (project level)		No.	2											2	11	11	2		
5.6 Agro-vet linkage tour (project level)		No.	1											1	25	25	1		
6. Workshops		No.	14	4										382	1		839		
6.1 Marketing		No.	2	1					80	6				59	12		100		
6.2 Seed marketing		No.	3	2										1			195		
6.3 Contract farming		No.	1	1										2			195		
6.4 Post harvest technology		No.	1						80					1			23		
6.5 MDP orientation (MG member, traders, L.A, DC)		No.	1							1				1			80		
		No.												1			58		

Annex-2

Publication on Marketing Development Program 1997/98- 2001/2002

1. "Proceedings of Marketing Workshop of Market Access for Rural Development (MARD) Project "June 15, 1997 Tulsipur, Dang Nepal" July, 1997 (Workshop sponsored by MARD/PCO, MARD/Chemonics/Rapti, MARD/CECI/Bheri).Ajaya N Bajracharya. MARD/Chemonics/Rapti Workshop Report No.1.
2. "Proceedings of Seed Marketing Management Workshop, October 22-23, 1997" December, 1997. organized by MARD/ Chemonics/ Rapti, MARD/Bheri/CECI and MARD/PCO. Ajaya N Bajracharya. MARD/Chemonics/Rapti Report No4.
3. Proceedings of Contract Farming and Marketing Workshop. May 15, 1998. Ajaya N. Bajracharya. MARD/Chemonics/Rapti, Workshop Report No.10.
4. Proceedings of Seed Marketing Management Workshop May, 22-23, 1998, Tulsipur, Dang. (for MARD/Rapti/Chemonics/MARD Bheri/CECI and MARD/PCO). Ajaya N Bajracharya. Workshop Report No.9. January, 1999.
5. Indian Markets Tour"Report September- October, 1997. (for MARD/ Chemonics/ Rapti). Ajaya N Bajracharya MARD/Chemonics/Rapti, Training /Tour Report No.5 January, 1998.
6. A Report on Indian Market Tour (April 9-25, 1998). July, 1998 (Ajaya N Bajracharya Mr. Rajendra Sahu, DC, MARD/Rapti/Chemonics). . MARD/Chemonics/Rapti, Training/ Tour Report No.11. July, 1998.
7. A report on Market Linkage Tour, Rupandehi. Dec. 1998. MARD/Chemonics (Ajaya N Bajracharya. Training/ Tour Report No.14, January ,1999 Ajaya Bajracharya, Shailendra Shrestha).
8. A Report on Analysis of Tomato Prices of Kapurkot Haat Bazaar, Sallyan, 2054 (1997), May, 1998 Ajaya N Bajracharya MARD/ Rapti. Technical Report No.20. July, 1998.
9. A Report on Marketing Problems of Tomato at Kapurkot Haat Bazar July 25-August 1, 1997. MARD/ Chemonics/ Rapti). Ajaya N Bajracharya. M. Mustafa, MARD/ Chemonics/ Rapti Report No.4. August, 1997
10. Market Development Activities of MARD-Rapti at Kapurkot Haat Bazar in 1997. MARD/ Chemonics/ Rapti. Technical Report No 14. Ajaya N Bajracharya. March, 1998.
11. A Report on Small Agro-Enterprise Development and Marketing Management Training (December 17-19, 1997) for MARD/Rapti, Chemonics, Agro Enterprise Center, Nepal. Ajaya N Bajracharya. MARD/ Chemonics/ Rapti Technical Report No.6. February , 1998.
12. Market Potential in India for Agri. Products of Rapti Zone, Nepal. Dr. A Kulkarni MARD/ Chemonics/ Rapti Technical Report No2 June, 1997
13. Indian Market Support Short Term Report. .Dr. A Kulkarni MARD/ Rapti Technical Report No.1 June , 1997.
14. Market Information System of MARD. MARD/Rapti, Chemonics Technical Report No.19. (A paper presented at National Seminar on Agricultural Marketing Information System June 10-11, 1998, Kathmandu, Nepal (Organized by Dept. of Agriculture Nepal, Support to new Kalimati Project (NEP /91/035); Small Market Infrastructure Project (NEP/89/CO4).
15. An Action Plan For Butwal Horticultural Market Development. 1999. Jim Diller. MARD/Chemonics Tech. Report Tech. Report No. 28.
16. Rapid Reconnaissance Survey Report on Relocation of MARD/TA Team Activity, July, 1998. MARD/Chemonics Tech. Report Technical Report No 22.1 (Ajaya N Bajracharya. Dr. L. Sherchan, Mr. S. Shrestha).

Annex-2 (contd..)

17. MARD Market Information Program MARD/Lumbini-Gandaki Technical Report No. 31) February,1999 (Ajaya N Bajracharya. Dr. Forrest Walters, Mr. M.G. Shrestha).
18. Status report of MARD Activities for Butwal Horticultural Market Development,July-August,1999. (For MARD/Chemonics). Ajaya N Bajracharya.Technical Report No.45,July,1999.
19. MARD Marketing Demonstration Program. MARD L-G Tech. Report. No. 63 (Ajaya N Bajracharya., Dr. F. Walters, A. Shah, Dr. S.K. Chaudhary, M.G. Shrestha) MARD/Chemonics Tech. Report
20. Seed Input Marketing Directory.1999. MARD/Chemonics Technical Report No.30..MARD TA Team.
21. MARD/Lumbini-Gandaki High Value Crop Seed Input Marketing Directory- 1999/2000. (MARD/L.G. Tech. Report No. 61) (Ajaya N Bajracharya., A. Shah, S.K. Chaudhary).February,2000.
22. Report on Marketing Management Training for Local Agro-vets January, 2000 By Ajay Bajracharya MS (MARD/Chemonics Tech. Report Training Tour Report No.25)
23. Report on Group Marketing Training. December 21-23, 1999. (By Ajay N. Bajracharya MS (MARD L.G MARD/Chemonics Tech. Report Training Tour Report No. 26).
24. An Overview of Post-Harvest handling Activities in MARD Project Areas 1999-2000. March, 2000. (By Ajay N. Bajracharya, MS; MARD L-G Training Tour Report. No. 28).
25. Training on Market management for Promotion of Agro-Enterprises(June 28-30,1999) MARD/Chemonics Training/Tour Report No.18.Ajaya Bajracharya
26. An Analysis of Agricultural Wholesale Prices of Major Commodities (1997-1998) April, 2000. (By Ajay N. Bajracharya, MS MARD L-G Tech. Report No. 70).
27. MARD/Lumbini-Gandaki High-Value Crop Seed Input Marketing Directory, February, 1999. (By MARD/TA Team MARD L-G Tech. Report. No. 32).
28. MARD Lumbini-Gandaki High Value Crop Seed Input Directory 1999-2000, February, 2000 (By Ajay N. Bajracharya MS, Ashok Shah, HES, Dr. S.K.Chaudhary SES, MARD L-G. Tech. Report No. 61.
29. MARD Marketing Demonstration Program. MARD Lumbini-Gandaki Tech. Report No. 63. By A.N.Bajracharya (MS), Dr. S.K.Chaudhary (SES), Ashok Shah (HES), M.G.Shrestha (TOM), Dr. F.Walters Consultant.
30. Post-Harvest Technology Action plan for MARD Lumbini-Gandaki Project. (MARD L-G Tech. Report No. 64. By Dr. L.Kitinoza, R. Schermerhorn/VOCA, A.Brown VOCA, M.J.Thapa NARC.
31. Group Seed Buying of High Value Crops in MARD Production Pockets. March, 2000 (By Dr. Kedar Budhathoki, STC)
32. A Report on Development of Criteria for the Collection Center. Deepak Sharma Dr.T.N.Shrestha, Krishna Khanal,Ajaya Bajracharya,Shailendra Shrestha. MARD Lumbini-Gandaki Tech. Report No.86.1.November ,2000.

Annex-3

List of Workshops Participated by the Marketing Specialist

1. Marketing Work Shop June 15,1997 .Organized by MARD/PCO, MARD/Chemonics/Rapti, MARD/CECI/Bheri at Tulsari, Dang.
2. Seed Marketing Work Shop May 22-23,1998, organized by MARD/PCO, MARD /Chemonics/Rapti, MARD/CECI/Bheri at Tulsari, Dang.
3. Seed Marketing Work Shop June 15,1997, Organized by MARD/PCO, MARD/Chemonics /Rapti, MARD/CECI/Bheri at Tulsari.Dang.
4. Contract Farming and Marketing Work Shop, May 15,1998 .Organized by,MARD/Chemonics /Rapti, and Agro-Enterprise Center, Tulsipur. Lalmatiya,Dang.
5. Bottom -Up Planning Workshops organized by MARD /Chemonics/Rapti at Kaurkot, (Sallyan, Dhanauri, Tulsipur, Ghorahi, Lamahi. (Dang), Devisthan, Bijuwar, Macchi (Pyuthan in January 1998.
6. Marketing Workshop Lamahi, Dang, September 1-2.Organized by Secondary Crops Development Project DOA.
7. Vegetable a Seed Marketing Work Shop,Tulsari Pur, Dang June 4,1997. Organized by Rapti Fruits and Vegetable Development Program, Tulsipur
8. Niger Seed Production and Marketing Management WorkShop, Tulsipur, Dang May 28. Organized by Agro-enterprise Center, FNCCI, Dang.
9. Annual Planning Workshop of MARD, January 18-20, 1998, Tulsari, Dang
10. National Seminar On Marketing Information System.June 10-11,1998. Organized by Marketing Development Devision, DOA, Support to a New Kalimati Wholesale Market Project(NEP/91/o35), Small Market Infrastructure Development Project(NEP/89/CO4).
11. Post-harvest Technology Workshop September 6-7,1999, Mangalapur, Rupandehi. Organized by MARD/Lumbini-Gandaki.
12. Fifteen Bottom-Up Planning Workshops facilitated in Rupandehi, Kapilvastu, Syangja Palpa, Nawalparasi .Kaski for MARD/Lumbini-Gandaki .November-December,1998 and June,1999.
13. Marketing Work Shop June 12-13,1999.at Nepalgunj,Banke.Organized by MARD/PCO/Rapti, MARD/CECI/Bheri, DOA.
14. Six Bottom -Up Planning Workshops facilitated in five districts namely Rupandehi, Kapilvastu, Nawlaprasi, Palpa, Syangja. in 2000/2001. Organized by MARD/Ta/Lumbini-Gandaki.
15. Five District Level Workshops facilitated in five districts namely Rupandehi, Kapilvastu, Nawlaprasi, Palpa, Syangja. in 2000/2001. Organized by MARD/Ta/Lumbini-Gandaki.
16. Production and Marketing Workshop at RATC, Bhairawa.June, 2001.Organized by MARD/PCO.
17. National Seminar on Vegetable Seed Production and Marketing, August 2001 at Kathmandu.Organized by National Seed Board, SSSP(DFID), MARD/Chemonics(USAID)etc.
18. Annual Planning Workshop of MARD for F/Y 2058/59. Organized by MARD/PCO at Khairani, Tanahu, February 2000.

Annex-5

List of Marketing Extension Materials Handouts /Leaflets/Papers etc. Prepared and Distributed

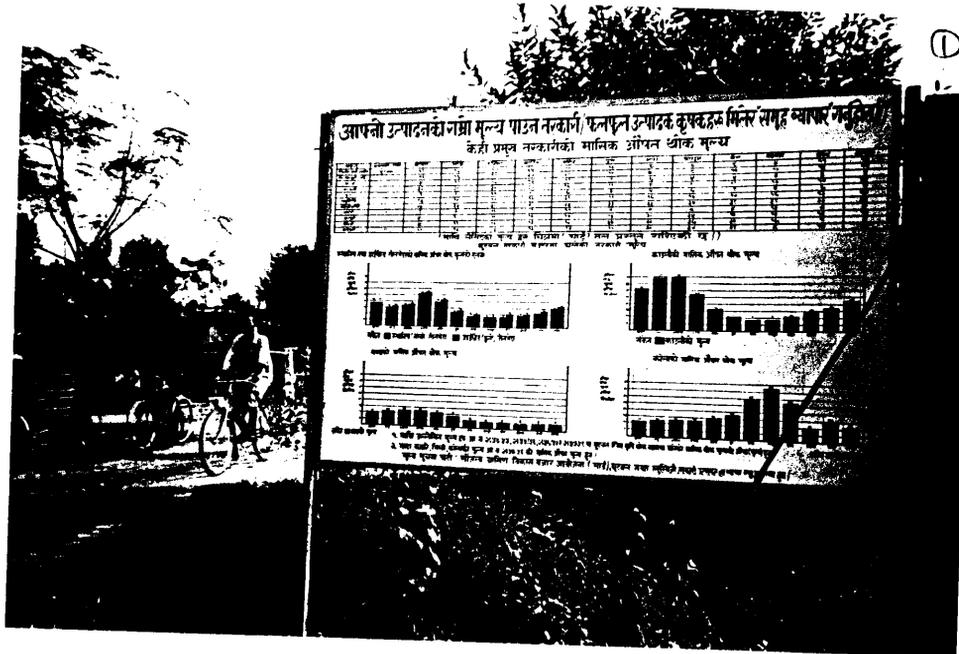
Sn	Topic	Author	Language	Page	Remarks
1	How to Conduct Group Marketing.	Ajaya N Bajracharya	Nepali	12	Training/Extension Manual
2	Golden Opportunity(For Group Marketing operation).	Ajaya N Bajracharya	Nepali	6	Leaflets for 6 Prod. Pockets
3	Benefits from Group Marketing.	Ajaya N Bajracharya	Nepali	2	Leaflet
4	Things to be considered to make Group Marketing successful.	Ajaya N Bajracharya	Nepali		Leaflet
5	Shree Ganeshayenama.Secret of Business Success.	Ajaya N Bajracharya	Nepali	1	Leaflet
6	Role of Agricultural Extension workers/Motivators in Group Marketing Strengthening.	Ajaya N Bajracharya	Nepali	3	Handout
7	Group Marketing and its Importance.	Ajaya N Bajracharya	Nepali	4	Handout
8	Why Group Marketing is Necessary ?	Ajaya N Bajracharya	Nepali	1	Leaflet
9	Concept of Market and Marketing. In Brief.	Ajaya N Bajracharya	Nepali	5	Handout
10	Price Fixation. In brief	Ajaya N Bajracharya	Nepali	6	Handout
11	Group and Simple Book-keeping	Ajaya N Bajracharya	Nepali	6	Handout
12	Madan Pokhara Vegetable Production and Market Management(Draft Constitution 2057)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
13	Madan Pokhara Multi -Purpose Agri.Marketing Coperative Pvt.Ltd 2058.(Constitution.)	Ajaya N Bajracharya	Nepali	13	with inputs from farmers and cooperative official
14	Beldiha Multi Purpose Agri.Marketing Management Cooperative 2058.(Draft Constitution.)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
15	Lumbini Vegetable Production and Market Management(Draft Constitution 2057) Khuda bagar Rupandehi	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
16	Lumbini Vegetable Production and Market Management(Draft Constitution 2057)Dayanagar,Rupandehi.	Ajaya N Bajracharya	Nepali	6	with inputs from farmers

Sn	Topic	Author	Language	Page	Remarks
17	Nigali Vegetable Production and Market Management(Draft Constitution 2057)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
18	Siddharth Vegetable Production and Market Management(Draft Constitution 2057).KNP,Kapilvastu	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
19	Dhankauli Vegetable Production and Market Management(Draft Constitution 2057)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
20	Nigali Vegetable Production and Market Management(Draft Constitution 2057)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
21	Baghmara Vegetable Production and Market Management (Draft Constitution 2057),Bharatpokhari,Kaski.	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
22	Lamgadi Vegetable Production and Market Management(Draft Constitution 2057)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
23	Rajahar Vegetable Production and Market Management (Draft Constitution 2057),Nawlaparasi.	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
24	Triyasi Vegetable Production and Market Management (Draft Constitution 2057)Syangja.	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
25	Andhikhola Vegetable Production and Market Management (Draft Constitution 2057),Syangja.	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
26	Dumre Vegetable Production and Market Management(Draft Constitution 2058)	Ajaya N Bajracharya	Nepali	6	with inputs from farmers
27	Butwal Fruits and Vegetable Wholesalers Association Constitution 2056.Butwal	Ajaya N Bajracharya & K.P.Khanal, Legal advisor, BNP	Nepali		with inputs from wholesalers
28	Suchana! Suchana! Suchana! Collection Center Opening At your Place!Khudabagar.	Ajaya N Bajracharya	Nepali	1	Leaflet
29	Agreement between MARD/Chemonics and Marketing Group	Ajaya N Bajracharya	Nepali	1	Leaflet
30	Seed Contract Agreement between Seed Traders and Farmers Groups	Ajaya N Bajracharya	Nepali	2	Leaflet
31	Shitalnagar Muliti-Purpose Agri.Marketing Co-operative 2057.Draft constitution.	Ajaya N Bajracharya	Nepali	13	with inputs from farmers

Sn	Topic	Author	Language	Page	Remarks
32	Muliti-Purpose Agri. Marketing Co-operative 2054. Draft constitution. Kapurkot.	Ajaya N Bajracharya	Nepali	28	with inputs from farmers cooperative officials
33	Concept of Marketing Cost, Margin.	Ajaya N Bajracharya	Nepali	8	Handout
34	Demand and Supply. In Brief.	Ajaya N Bajracharya	Nepali	4	Handout
35	Some definition of Agricultural Production Costs.	Ajaya N Bajracharya	Nepali	5	Handout
36	Wel- Come To Kapurkot Hat Bazaar.	Ajaya N Bajracharya	Nepali	1	Leaflet
37	Wel-Come To Bijuar Hat Bazaar.	Ajaya N Bajracharya	Nepali	2	Leaflet and Poster
38	Wel -Come To Tulsipur Hat Bazaar.	Ajaya N Bajracharya	Nepali	2	Leaflet & Poster
39	Brief Introduction of Marketing Programs and strategies of MARD/Chemonics.	Ajaya N Bajracharya	Nepali	8	Handout
40	Market Information System of MARD	Ajaya N Bajracharya	Nepali	8	Handout
41	Papaya Marketing. In brief.	Ajaya N Bajracharya	Nepali	2	Handout
42	Introduction of Business. In brief.	Ajaya N Bajracharya	Nepali	2	Handout
43	Vegetable seed distribution System.	Ajaya N Bajracharya	Nepali	5	Handout
44	Vegetable Marketing. Few problems.	Ajaya N Bajracharya	Nepali	4	Handout
45	Post harvest activities for Cauliflower.	Ajaya N Bajracharya	Nepali	5	Handout/ Manual
46	Post harvest handling for Potato.	Ajaya N Bajracharya	Nepali	1	Handout/ Manual
47	Post harvest handling for Tomato.	Ajaya N Bajracharya	Nepali	5	Handout/ Manual
48	Post harvest handling for Cabbage.	Ajaya N Bajracharya	Nepali	8	Handout/ Manual
49	Status of Post -harvest handling and storage in Project area.	Ajaya N Bajracharya	English	6	Workshop Paper
50	Potential for post-harvest handling for better usage and marketing for nutritious food in rural households.	Ajaya N Bajracharya	English	8	Workshop Paper
51	Brief description of Post-harvest technology of fruits and vegetables.	Ajaya N Bajracharya	Nepali	9	Handout
52	Ways to minimize post-harvest handling losses of vegetables & fruits.	Ajaya N Bajracharya	Nepali	2	Handout
53	Preventive measures to be taken while transporting fruits & vegetables.	Ajaya N Bajracharya	Nepali	4	Handout

Sn	Topic	Author	Language	Page	Remarks
54	Consideration to be made while storing fruits and vegetables.	Ajaya N Bajracharya	Nepali	2	Handout
55	Vegetable marketing. Few problems.	Ajaya N Bajracharya	Nepali		Handout.
56	Organization Process and duties of Cooperatives.	Ganesh Shakya	Nepali	5	Handout.
57	Market Price Trend 2054-2058.	Ajaya N Bajracharya	Nepali	4	Handout.
58	Small-scale post-harvest handling techniques.	Lisa Kitinoza	Nepali	68	Manual
59	Market Price Trend in Graph 2054-2058.	MARD TA	English/ Nepali	32	Information Sheet/Chart
60	Background of Sindhuwa Multipurpose Cooperative Ltd.	Megendra Gurung	Nepali	2	Handout.
61	Accounting System of Sindhuwa Multipurpose Cooperative Ltd.	Megendra Gurung	Nepali	2	Handout.
62	Steps needed to be taken to minimize the post-harvest losses of horticultural produces (Tomato, Potato, Cabbage, Caulifliwer) picking, packaging, transportation, storage etc.	Mahendra Jung Thapa	Nepali	17	Handout.
63	Formation of Cooperative and marketing.	Megendra Gurung	Nepali	2	Handout.
64	Marketing cost calculation.	Megendra Gurung	Nepali	2	Handout.
65	Understanding Pricing Mechanism and seed pricing in Nepal.	Chitra Gautam	English	3	Handout.
66	Operation of Veterinary Business.	Chitra Gautam	Nepali	3	Handout.
67	Methods of calculation of Marketing costs and margins.	Chitra Gautam	Nepali	2	Handout.
68	Quality Control and inventory management.	Chitra Gautam	Nepali	3	Handout.
69	Simple Record keeping in Seed Business.	Chitra Gautam	Nepali	3	Handout.
70	Marketing Management for Local Agrovets.	Chitra Gautam	Nepali	4	Handout.
71	Seed Demand and Assessment(based on crop calendar/varieties)	Chitra Gautam	Nepali	2	Handout.
72	Overview of Seed Marketing and Distribution and Possible Roles of NGOs. in Nepal .Role of NGOs.	Ajaya N.Bajracharya	English		Paper presented at Third National Seed Seminar organized by National Seed Board (MOAC), SSSP (DFID), MARD (USAID) on August 13-14, 2001, Ktm.

Annex-4
Some Pictures of Market Development Activities



1. Price Information Board (at Dayanagar, Rupandehi).



2. Participation at meeting of Marketing Group (MG) at Madanpokahara, Palpa.



3. Collection Center management by MG in the Production site (Triyasi, Syangja)



4. Construction and operation of Collection /sales stall at major market hat bazaar (Three sales stalls constructed by three MGs of Rupandehi and Palpa, Butwal Hat Bazaar).



5. Construction and operation of Collection/sales stall at major market hat bazaar (sales stalls constructed by the Siddhartha MG of Kapilvastu at Taulihawa Hat Bazaar).

(6) (B)



6. Interaction and linkage strengthening between MG and wholesalers of major market (Wholesalers of Narayangarh wholesale market at Shitalnagar, Gaidakot VDC, and Nawlaparasi)

7. MG Learning from successful MG (MG form Syangja visiting MG of MadanPokhara Cooperative stall at Butwal ha: bazaar)



8. Group transportation from production site to distant market (Farmers from Madanpokhara, Palpa bringing their produces at Butwal market on hired truck.



9. Post-harvest handling training conducted for MG members

